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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,633	12/17/2001	Scott E. Silver	500035.401	2741

500 7590 03/31/2003

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EXAMINER

DICUS, TAMRA

ART UNIT PAPER NUMBER

1774

DATE MAILED: 03/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/024,633

Applicant(s)

SILVER ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24-43, 55 and 65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-21, 24-43, 55, 65, drawn to a weatherproof sheet classified in class 428, subclass 195.
  - II. Claims 22-23, drawn to a book, classified in class 283, subclass 63.1.
  - III. Claims 44-54, 56-64, drawn to a method of making a weatherproof sheet, classified in class 427, subclass 100.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the sheet of I can be made by impregnantly covering prior to drying.
3. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the sheet of I can be used in a calendar, banknotes, checkbooks, etc.

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4. Inventions of II and III are independent inventions, one not requiring the particulars of the other. The method of III does not require the book of II.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with James Miesher on 1/21/93 a provisional election was made with traverse to prosecute the invention of I, claims 1-21, 24-43, 55, 65. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-23, 44-54, 56-64, withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 3, 17, 26, and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of trademarked terms in claims does not identify or describe the goods associated with the trademark or trade name. The terms Lucidene 605 and

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Rite Rain Formula are not permitted in the claim. Trademarks or trade names are used to identify a source of goods, and not the goods themselves. See MPEP 2173.05(u). Replacement of trademarked terms with a generic description is advised.

2. Claims 1 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Throughout the specification and claims, it is not described what "tooth" means in reference to a filler. For purposes of examination, the Examiner will regard this description to mean a filler.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-2, 4, 7-8, 10-16, 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,028,028 to Nitta.

Nitta teaches a water-proof sheet for laser printing comprising a cellulosic substrate (paper), a coating layer of a copolymer or mixture derived from styrene and acrylic, wax, clay (antiblock filler), calcium carbonate (filler for tooth property), and a pigment which may be inorganic like kaoline or titania. Since the pigment and resins are included in the mixture, they

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are dispersed as well. See col. 9, lines 1-11, col. 11, lines 4-15, 40-55 and col. 12, lines 1-15. The fillers may also include barium sulfate and calcined clay. See col. 12, lines 61-68. Additives may include metal salts of fatty acids and paraffin wax at col. 11, lines 15-35.

While Nitta does not refer to his water-proof sheet as a weatherproof sheet, the Examiner takes the position since the same materials are included, the sheet of Nitta includes the sheet of the invention as it acts as a functional equivalent. Additionally, the reference states that the sheets are waterproof which encompasses weatherproof.

That the weatherproof sheet is capable of fixedly and legibly bearing images is not germane since it has been held that an element that is "being able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

At col. 11, line 55 the coating weight is between 2 and 12 g/m<sup>2</sup>, meeting the claimed range of Applicant (5.6 to 8.5 g/m<sup>2</sup> of claim 4).

Addressing claims 8, 11, and 12, at col. 12, line 4, Nitta teaches fillers calcium carbonate, barium sulfate, and titania added from 20 to 60 wt%, meeting Applicant's claimed ranges. The moisture content is inherent since the same percentage ranges are included.

The printed images of claims 19-21 are provided to the sheet of Nitta, since Nitta teaches an image receiving sheet and states his sheet is suited for images to be printed on it. See Figure 1, col. 13., lines 52-60 teach a pencil written on the sheet. Also Examples 5 and 6 refer to printing onto the sheet and checked for image retention. That the images are printed by means of lithography... are process limitations in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

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Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531.

That the image is written on by a pencil or pen is not germane to patentability as it adds no positive recitation.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2, 5-16, 18-20, 24-25, 28-37, 40-43, 55, and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,919,552 to Malhotra.

Malhotra teaches a coated substrate and method of doing so. A coating layer of a copolymer or mixture derived from styrene and acrylic, wax, clay (antiblock filler), calcium carbonate (filler for tooth property), a pigment, may be inorganic like titania. See col. 13, lines 36-52 teaching paraffin wax added in amounts from 0.25 to 3%, meeting range of claims 5, 6, Malhotra teaches at col. 3, lines 30-40 various paper substrates and at line 65-68 teaches the substrates can be from 50 to 500 microns thick and may be outside these ranges, meeting the range of claims 40-42. At col. 10, lines 15-45, Malhotra explains adding fluorescent chemical compounds that convert UV radiation to visible radiation at the blue end of the spectrum and known as fluorescent whitening agents or optical brighteners are derived from stilbene, coumarine and naphthalimide. Other fluorescent brighteners are derived from fluorescent dyes as well as polymeric dyes such as polymeric phthalocyanines, and the like. Commercially sold



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pigment colors are dispersed in polymers such as polyamide or triazine-aldehyde-amide (addressing claims 13, 14, 24, 35, 37) and are available from Day-Glo Color Corporation, such as Day-Glo-A-Series. See also col. 14, lines 20-45. Malhotra's patented claim 9 includes a coating composition of titanium dioxide, hydrated alumina, barium sulfate, calcium carbonate, and high brightness clays from 0.5 to 20 parts by weight, meeting claims 7-12, 16, and 30-35. The moisture content is inherent since the same weights are used.

Malhotra teaches at col. 13, lines 36-52 teaching paraffin wax added in amounts from 0.25 to 3%, which are suitable ranges in a coated sheet for release and printability improvements, meeting range of claims 5, 6, 28, and 29. The moisture content is inherent since the same material and weight percentages are included.

The printed images of claims 19-21 and 55 are provided to the sheet of Malhotra, since Malhotra teaches an image receiving sheet and states his sheet is suited for images to be printed on it, see col. 27, lines 15-22. That the images are printed by means of lithography... are process limitations in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531.

That the weatherproof sheet is capable of fixedly and legibly bearing images (claims

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55,65) is not germane since it has been held that an element that is "being able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Regarding claim 24. Malhotra teaches at col. 10, lines 15-45 adding an optical brightener. Malhotra explains adding fluorescent chemical compounds that convert UV radiation to visible radiation at the blue end of the spectrum and known as fluorescent whitening agents or optical brighteners.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 21, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,919,552 to Malhotra in view of USPN 6,028,028 to Nitta.

Malhotra does not teach the coating weight -5.6 to 8.5 g/m<sup>2</sup> of claims 4 and 27. Nitta teaches a water-proof sheet for laser printing comprising a cellulosic substrate (paper), a coating layer of a copolymer or mixture derived from styrene and acrylic, wax, clay (antiblock filler), calcium carbonate (filler for tooth property), a pigment, may be inorganic like kaoline or titania. At col. 11, line 55 Nitta teaches the coating weight is between 2 and 12 g/m<sup>2</sup>, meeting the claimed range of Applicant (5.6 to 8.5 g/m<sup>2</sup> of claims 4 and 27). Hence, it would have been obvious to one of ordinary skill in the art to modify the coated substrate of Malhotra to add a

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coating weight of 5.6 to 8.5 g/m<sup>2</sup> since Nitta teaches it is a suitable range to use for laser printing.

As recited above, Malhotra teaches col. 13, lines 36-52 teaching paraffin wax added in amounts from 0.25 to 3%, meeting range of claims 5, 6, 28, and 29. Malhotra is silent to teaching a copolymer or mixture from 30 to 63 percent. Nitta teaches at col. 11, lines 10-15 a copolymeric mixture ranging from 2 to 40 weight %, meeting Applicant's claimed ranges 30-63% of claims 5, 6, 28, and 29. The moisture content is inherent since the same material and weight percentages are included. Hence it would have been obvious to one of ordinary skill in the art to modify the substrate of Malhotra to include the copolymeric mixture % because Nitta teaches adding these suitable ranges in a sheet for dispersion mediums as taught by Nitta at col. 11, lines 1-15.

### ***Claim Rejections - 35 USC § 103***

Claims 5, 6, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,028,028 to Nitta in view of USPN 5,919,552 to Malhotra

Nitta essentially teaches the claimed invention, as relied upon above. Nitta does not teach adding optical brighteners of claim 24. Hence it would have been obvious to one of ordinary skill in the art to modify the sheet of Nitta to add optical brighteners since Malhotra teaches the advantage of providing visible radiation. Malhotra teaches at col. 10, lines 15-45 adding an optical brightener. Malhotra explains adding fluorescent chemical compounds that convert UV radiation to visible radiation at the blue end of the spectrum and known as fluorescent whitening agents or optical brighteners. Hence it would have been obvious to one of

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ordinary skill in the art to modify the sheet of Nitta to add optical brighteners since Malhotra teaches the advantage of providing visible radiation.

As cited above, Nitta teaches at col. 11, lines 10-15 a copolymeric mixture ranging from 2 to 40 weight %, meeting Applicant's claimed ranges 30-63% of claims 5, 6, 28, and 29. However, Nitta is silent to adding wax in the percentages claimed. Malhotra teaches col. 13, lines 36-52 teaching paraffin wax added in amounts from 0.25 to 3%, meeting range of claims 5, 6, 28, and 29. Hence, one would be motivated to combine wax with the sheet of Nitta since Malhotra teaches adding wax in the range percentage claimed improves printability as cited above.

### ***Conclusion***

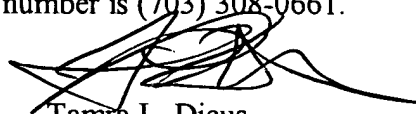
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,891,552 to Lu et al. teaches a coated sheet for printing. USPN 6,391,954 to Azizi et al. teaches a coated sheet containing optical brighteners. USPN 5,401,562 to Akao teaches photographic paper having various moisture content ranges.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tamra L. Dicus

Examiner

Art Unit 1774

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

March 20, 2003

